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10/762,467	01/23/2004	Makiko Mori	02910.000113.	5471

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EXAMINER	
SITTA, GRANT	
ART UNIT	PAPER NUMBER
2629	
MAIL DATE	DELIVERY MODE
10/27/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/762,467	MORI, MAKIKO	
	Examiner	Art Unit	
	GRANT D. SITTA	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 September 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuzuki et al (6,388,716) in view of Yamaguchi et al (5,675,391) hereinafter, Yamaguchi further in view, of Nagakubo et al (5,757,343) hereinafter, Nagakubo.

4. In regards to claim 1, Tsuzuki teaches a base method comprising a video display apparatus comprising (abstract):

a display panel (figs. 1 and 2, (18 and 33) respectively);

a converting circuit for executing conversion for an input video signal to output a converted video signal (figs. 1 and 2 (12));

a display brightness featured value detecting circuit for detecting a display brightness featured value indicating a brightness of a display screen (fig. 1 and 2 (21 and 32));

an adjustment circuit for adjusting the converted video signal on the basis of said display brightness featured value to output an adjusted video signal (fig. 1 and 2 (20) ; and

Tsuzuki fails to teach a superimposing circuit for superimposing a signal for displaying textual information or an icon on the adjusted video signal to output a superimposed video signal to the display panel.

However, Yamaguchi teaches a known device with a superimposing circuit for superimposing a signal for displaying textual information or an icon on the adjusted video signal to output a superimposed video signal to the display panel. (fig. 3 (30) superimposing circuit placed at the last stage before being sent to the display). Examiner notes the second video signal is for a television receiver which contains text and icon information related to channel and station information.

It would have been obvious to one of ordinary skill in the art would have recognized that applying the known device of a superimposing circuit and would have yielded the predictable result of applying addition information on the video signal of Tsuzuki, in order to easily convey information to the user, while still providing proper brightness characteristics relating to the image.

Therefore, Tsuzuki as modified by Yamaguchi teaches wherein said display brightness screen (fig. 1 and 2 (21 and 32) Tsuzuki) featured value detecting circuit

receives the superimposed video (fig. 3 (30) Yamaguchi) signal output from said superimposing circuit before the superimposed video signal is input to the display panel (fig. 2 (32) before sent to 33 Tsuzuki), and calculates the display brightness featured value from the received superimposed video signal (fig. 3 (30) and (28) Yamaguchi) in view of col. 3-4, lines 62-35 Tsuzuki), and

wherein an image is displayed on the basis of the superimposed video signal output from said superimposing circuit (fig. 3 (30 Yamaguchi col. 6, lines 62-67)).

Furthermore, Tsuzuki and Yamaguchi fail to expressly teach a converting circuit for executing **nonlinear conversion** for an input video signal to output a converted video signal.

However, Nagakubo teaches a converting circuit for executing nonlinear conversion for an input video signal to output a converted video signal (fig. 4 ((2) and 3)). Examiner notes gamma correction is a non-linear correction of a video signal and it is performed before that A/D.

It would have been obvious to one of ordinary skill in the art to modify the converting circuit of Tsuzuki and Yamguchi to include the use of a gamma correction circuit in order to ensure the image is display properly.

5. In regards to claim 2, Tsuzuki and Yamaguchi as modified by Nagakubo teaches a video display apparatus as defined in claim 1, wherein said adjustment circuit is an adjustment circuit for adjusting the converted video signal on the basis of a plurality of display brightness featured values which are sequentially detected (col.,2, lines 1-30

correction of brightness levels, at lowest, intermediate and highest levels as image is displayed Tsuzuki).

6. In regards to claim 3. Tsuzuki and Yamaguchi as modified by Nagakubo teaches a video display apparatus as defined in claim 1, wherein said adjustment circuit is also an adjustment circuit for adjusting the converted video signal on the basis of a brightness control value relating to an adjustment of image quality (fig. 1 and 2 (20) controller col. 4, lines 19-35 Tsuzuki).

7. In regards to claim 4, Tsuzuki and Yamaguchi as modified by Nagakubo (Previously Presented) A video display apparatus as defined in claim 1, wherein said display brightness featured value is a *sum* value of display signals for a predetermined period (fig. 3 R, G, and B Tsuzuki). Examiner notes the brightness features values are based on each color which is summed at, or before the display, for detection purposes.

Tsuzuki as currently applied fails to expressly teach wherein said display brightness featured value is an average value of display signals for a predetermined period.

However, both Yamaguchi and Nagakubo teach wherein said display brightness featured value is an average value of display signals for a predetermined period. (Yamaguchi uses (fig. 3 ABL) average brightness level detector) and Nagakubo states, "[t]he average luminance level detector circuit 23 detects an average luminance level

based on one field portion of R-pixel data, G-pixel data and B-pixel data each time a vertical synchronization signal is supplied from a synchronization separator circuit 4, and supplies a controller 20' with an average luminance level signal corresponding to the detected average luminance level. It should be noted that the average luminance level detector circuit 23 may detect an average luminance level of a plural-field portion of R-pixel data, G-pixel data and B-pixel data." co. 9, lines 14-23.

It would have been obvious to one of ordinary skill in the art to perform simple substitution. The prior art contained a device (i.e, using the brightness sum) which different from the claimed device (i.e using the average brightness), since Yamaguchi and Nagakubo teach the substituted components and their function were known in the art. It would generally be considered obvious to one of ordinary skill in the art to have substituted one known element, for another, and the results of the substitution would have been predictable.

8. In regards to claim 5, Tsuzuki and Yamaguchi as modified by Nagakubo teaches (Previously Presented) a video display apparatus as defined in claim 1,
wherein said display brightness featured value is the number of signals of the display signals for a predetermined period which have a greater value than a predetermined value. (fig. 3 R, G, and B Tsuzuki). Examiner notes the brightness features values are based on each color which is summed at, or before the display, for detection purposes.

9. In regards to claim 6, Tsuzuki and Yamaguchi as modified by Nagakubo teaches (Previously Presented) a video display apparatus as defined in claim 1, wherein said display brightness featured value is a sum or average value of display signals for each color for a predetermined period. (fig. 3 R, G, and B Tsuzuki). Examiner notes the brightness features values are based on each color which is summed at, or before the display, for detection purposes.

10. In regards to claim 7, Tsuzuki and Yamaguchi as modified by Nagakubo teaches a video display apparatus as defined in claim 1, wherein said display brightness featured value is a a sum value of brightness components of display signals for a predetermined period. (fig. 3 R, G, and B Tsuzuki).

Tsuzuki as currently applied fails to expressly teach wherein said display brightness featured value is an average value of display signals for a predetermined period.

However, both Yamaguchi and Nagakubo teach wherein said display brightness featured value is an average value of display signals for a predetermined period. (Yamaguchi uses (fig. 3 ABL) average brightness level detector) and Nagakubo states, "[t]he average luminance level detector circuit 23 detects an average luminance level based on one field portion of R-pixel data, G-pixel data and B-pixel data each time a vertical synchronization signal is supplied from a synchronization separator circuit 4, and supplies a controller 20' with an average luminance level signal corresponding to the detected average luminance level. It should be noted that the average luminance

level detector circuit 23 may detect an average luminance level of a plural-field portion of R-pixel data, G-pixel data and B-pixel data." co. 9, lines 14-23.

It would have been obvious to one of ordinary skill in the art to perform simple substitution. The prior art contained a device (i.e, using the brightness sum) which different from the claimed device (i.e using the average brightness), since Yamaguchi and Nagakubo teach the substituted components and their function were known in the art. It would generally be considered obvious to one of ordinary skill in the art to have substituted one known element, for another, and the results of the substitution would have been predictable.

11. In regards to claim 8, Tsuzuki and Yamaguchi as modified by Nagakubo teaches (Previously Presented) a video display apparatus as defined in claim 1,
wherein said display brightness featured value is a statistical value of display signals in a specific area of one display screen (fig. 2 statistical value of the current detected at (32) Tsuzuki).

12. In regards to claim 9, Tsuzuki and Yamaguchi as modified by Nagakubo (Previously Presented) A video display apparatus as defined in claim 1,
wherein pixels of said video display apparatus are constructed of display elements arranged in matrix (fig. 14 horizontal and vertical characteristics of the display Tsuzuki) .

Response to Arguments

13. Applicant's arguments filed 7/23/2010 have been fully considered but they are not persuasive.

14. In response to Applicant's remarks that the prior fails to teach a display brightness featured value detecting circuit that receives a superimposing video signal output from the superimposing circuit before the superimposing video signal is input to the display panel and calculates the display brightness featured value from the received superimposed video signal. Applicant asserts the display brightness featured value of Tsuzuki is based on a test pulse-not a superimposed signal for displaying. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Under the current facts, Examiner asserts all the components are well known in the art as illustrated by the prior art shown above. Applicant asserts that the positioning of the components is novel and Applicant states, "the textual information superimposing circuit 10 is called as "OSD" (On Screen Display) in general, and superimposes textual information and/or an icon or more on the video signal in accordance with the settings of the system control section 21. The textual information superimposing circuit 10 is placed on a stage after the multiplier 3 and adder 9 so as not to be influenced by them, because one can feel visual wrongness if luminance of the superimposed text or icons

is changed due to the ABL control and/or the adjustment of image quality. In recent years, information to be superimposed in the textural information superimposing circuit 10 has ranged over a large area and has a greater ratio of its occupying area to a whole of the display signal, and so the frame featured value detecting section 4 is placed on a stage after the textual information superimposing circuit 10". [0059] PG PUB 10/762467. Or, in other words, the frame brightness is considered at a stage after the OSD, so the OSD is considered, but adjustments are made before a signal is input into the OSD.

Tsuzuki teaches an automatic brightness correction apparatus for automatically correcting the brightness property of the image display device is configured to insert a test pulse at a predetermined level within a level range including an intermediate level to the video signal and displays the image of the test pulse on the video image display device, detect a deviation of the brightness of the image of the test pulse displayed on the video image display device from a benchmark, and correct the level of the video signal based on the detected deviation. While Tsuzuki teaches using a test pulse the claim language fails to preclude from using a test pulse. Examiner asserts the modification, Tsuzuki in view of Yamaguchi would simply allow for a test pulse to be inserted into a superimposed video signal and the display brightness feature would still be considered and calculated "from the received superimposed video signal", as claimed.

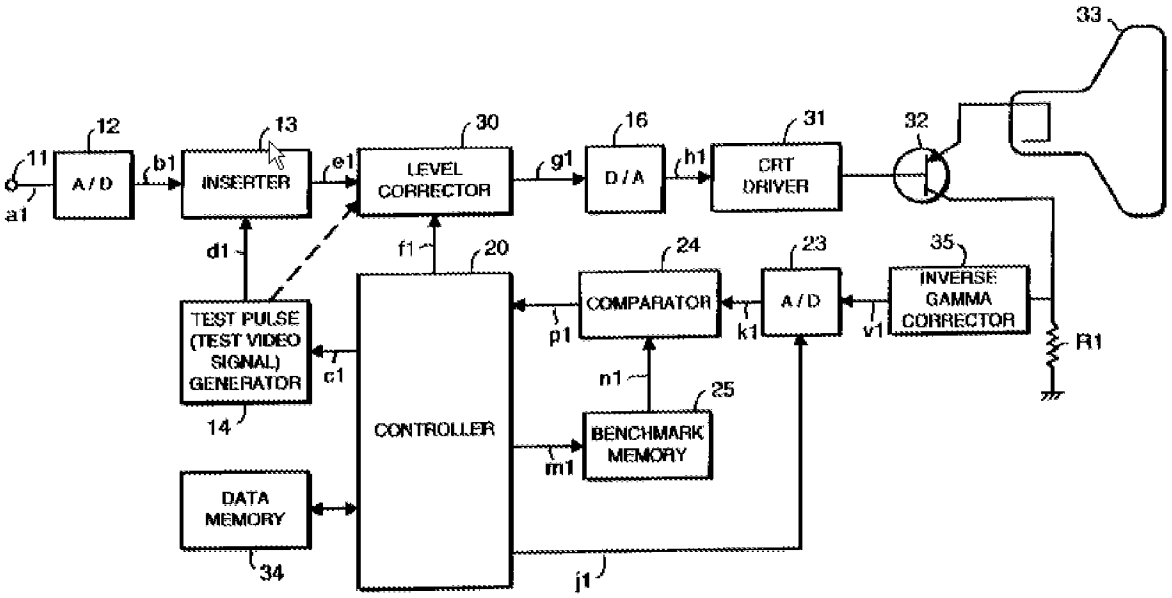
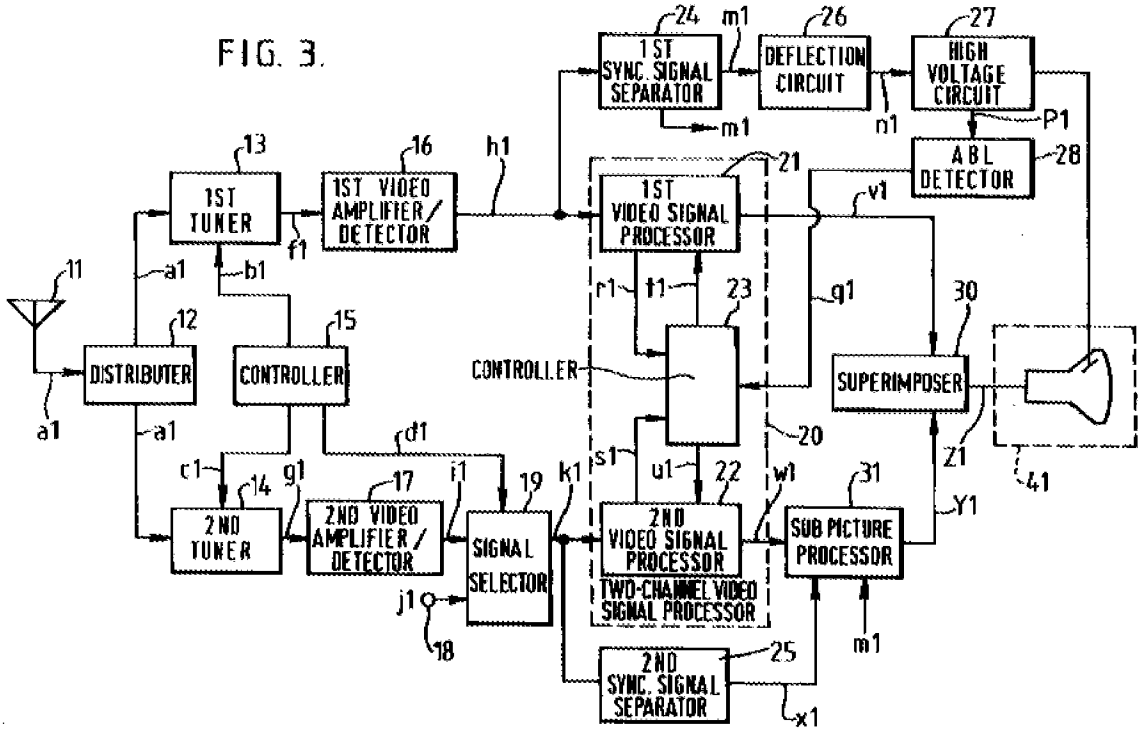


FIG.2

Yamaguchi teaches a superimposing circuit fig. 3 (30) shown below. The ABL detector is taken from the anode current from the CRT, which is different from the claimed “wherein said display brightness featured value detecting circuit receives the superimposed video signal output from said superimposing circuit before the superimposed video signal is input to the display panel.” Examiner notes, though the ABL is considered from the superimposed circuit corrections are made to the brightness for a 1st video signal independently fig. 4 (signal from g1 and (211)).

FIG. 3.



Examiner asserts it would have been obvious to one of ordinary skill to modify the brightness correction means of Tsuzuki, and insert the superimposing circuit (30) at the final stage of Tsuzuki, i.e., between (31 and 32 shown in fig. 2), in order to provide a means that does not limit brightness of one main picture element when compared with one sub picture element see col. 3, lines 40-67.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT D. SITTA whose telephone number is (571)270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Grant D Sitta/
Examiner, Art Unit 2629